

WHAT IS CLAIMED IS

5 1. A skeletal implant of the type to be used for connecting at least two elements (4,5) of the skeleton, said implant comprising at least two parts (7,8), each of which is capable to be connected to one of said elements, said at least two parts being movable with respect to each other, wherein there is provided a damping device (9) having an adjustable damping coefficient between said at least two parts, said damping device being responsive to non invasive control means to adjust said adjustable damping coefficient.

10 2. A skeletal implant of the type to be used for connecting at least two elements (4,5) of the skeleton, said implant comprising at least two parts (7,8), each of which is capable to be connected to one of said elements, said at least two parts being movable with respect to each other, wherein there is provided a force exerting device, between said at least two parts, to exert a force between said at least two elements of the skeleton, said force exerting device being responsive to non invasive control mean, to establish and to cancel said force.

15 3. A skeletal implant of the type to be used for connecting at least two elements (4,5) of the skeleton, said implant comprising at least two parts (7,8), each of which is capable to be connected to one of said elements, said at least two parts being movable with respect to each other, wherein there is provided a means authorising a travel between said at least two parts, from an initial starting position to a displaced position, said means authorising a displacement being responsive to non invasive control means to authorise and interrupt this displacement and to adjust said displaced position.

20 4. A skeletal implant as claimed in claim 2, wherein the intensity of said force is adjustable through said control means.

25 5. A skeletal implant as claimed in claim 2, wherein said force can be canceled or adjusted at an adjustable position of one of said parts with respect to the other part.

6. A skeletal implant as claimed in claim 3 wherein said means authorising a displacement are, at least partially, reversible to authorise a displacement in a direction opposite or different to a direction of a precedent displacement.
- 5 7. A skeletal implant as claimed in claim 3 wherein said means authorising a displacement are also responsive to a force or pressure sensor on said implant, and
8. A skeletal implant as claimed in claim 2 comprising at least a force, pressure or distance sensor on said implant and/or on bone element.
- 10 9. A skeletal implant as claimed in claim 3 comprising at least a force, pressure or distance sensor on said implant and/or on a bone element.